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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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Dieter Pauschinger

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SCHIFF HARDIN, LLP  
PATENT DEPARTMENT  
6600 SEARS TOWER  
CHICAGO, IL 60606-6473

EXAMINER

SCHUBERT, KEVIN R

ART UNIT

PAPER NUMBER

2137

DATE MAILED: 01/31/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	Application No. 10/090,997	Applicant(s) PAUSCHINGER, DIETER	
	Examiner Kevin Schubert	Art Unit 2137	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 17 January 2006.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-7,9,10 and 12-14 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-7,9-10,12-14 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |   |   |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)                        | 4) <input type="checkbox"/> Interview Summary (PTO-413)                     |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)    | Paper No(s)/Mail Date. _____  |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date _____   | 6) <input type="checkbox"/> Other: _____                                    |

**DETAILED ACTION**

Claims 1-7,9-10, and 12-14 have been considered. Examiner maintains the rejection presented in the previous action. A Response to Arguments section concludes this action.

5

***Claim Rejections - 35 USC § 112***

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

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Claims 3 and 4 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

The applicant refers to "said dataset" in part b of the claim. The examiner assumes the applicant is referring to the second dataset, but it is unclear whether the applicant is referring to the first or second

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dataset. Claim 4 is rejected for being dependent on indefinite claim 3.

Claim 12 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. The applicant discloses "analyzing said use data to identify usage behavior at said use location". It is unclear whether "at said use location" refers to the analysis or the usage value; more specifically, it is unclear whether or not the analysis takes place at the use location.

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***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness

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rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

30

Claims 1-3,6-7,9-10, and 13-14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Moore, U.S. Patent No. 6,133,850, in view of Schneier (Schneier, Bruce. Applied Cryptography. John Wiley & Sons. 1996. pages 34-41).

As per claim 1, the applicant describes a method comprising the following limitations which are met by Moore in view of Schneier:

- a) non-volatilely storing at least one rate value for usage of a commodity, said rate value being valid within a predetermined time span (Moore: Col 5, line 20 to Col 6, line 9);
- b) obtaining respective measured values, using a mathematical algorithm, representing delivery of said commodity to a use location and output of said commodity from said use location (Moore: Col 5, line 20 to Col 6, line 9);
- c) obtaining time data relating to usage of said commodity at said use location and generating at least one usage value representing usage of said commodity at said use location, from said time data and said measured values (Moore: Col 5, line 20 to Col 6, line 9);
- d) generating a monetary charge for said usage of said commodity at said use location from said usage value and said rate value (Moore: Col 5, line 20 to Col 6, line 9);
- e) generating an electronic message that includes at least said charge (Schneier: pages 37-38);
- f) forming a check code for protecting said electronic message (Schneier: pages 37-38);
- g) generating a protected message that contains said electronic message and said check code (Schneier: pages 37-38);
- h) establishing electronic communication with a recipient at a location remote from said use location and electronically transmitting said protected message as a dataset to said recipient (Moore: Col 5, line 20 to Col 6, line 9; Schneier: pages 37-38).

Moore discloses all the limitations of the above claim except for the limitation that a *check code* accompanies the electronic message that is sent from the use location to the remote location. Combining

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the ideas of Schneier with Moore allows the electronic message that is sent from the use location to the remote location to include a digital signature (check code). It would have been obvious to one of ordinary skill in the art at the time the invention was filed to combine the ideas of Schneier with those of Moore and use a digital signature for at least the reasons of providing a means to check the authenticity of a message and its sender.

As per claim 2, the applicant describes the method of claim 1, which is met by Moore in view of Schneier, with the following limitation:

Wherein the step of establishing said electronic communication with said recipient comprises making an initial attempt to establish said electronic communication with said recipient and, if said initial attempt is unsuccessful at establishing said electronic communication, repeatedly attempting to establish said electronic communication with said recipient until expiration of a predetermined limit;

Moore discloses establishing electronic communication with a recipient (Col 6, lines 1-9). However, Moore does not specifically disclose repeatedly attempting to establish communication for a predetermined time limit if the initial attempt is unsuccessful. The examiner takes official notice as this idea is well-known in the art, and it would have been obvious to one of ordinary skill in the art at the time the invention was filed to incorporate this idea into Moore in view of Schneier for the purpose of efficiently and successfully establishing communication.

As per claim 3, the applicant discloses the method of claim 1, which is met by Moore in view of Schneier, with the following limitations which are also met by Moore and Schneier:

a) at said recipient, upon receiving said first dataset, checking said first dataset for authenticity generating an enable code as a second dataset (Moore: Col 5, line 20 to Col 6, line 9; Schneier: pages 37-38);

b) at said recipient, cryptographically protecting said enable code with an electronic signature of said recipient and transmitting said dataset with said electronic signature from said recipient to said use location as a return message (Moore: Col 5, lines 20 to Col 6, line 9; Schneier: pages 37-38);

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c) at said use location, checking said enable code for authenticity by verifying said electronic signature (Schneier: pages 37-38).

As per claims 6 and 7, the applicant describes the method of claim 1, which is met by Moore in  
5 view of Schneier, with the following limitation which is also met by Moore:

The additional step of generating said usage value at an end of a predetermined time segment for use of said commodity (Moore: Col 5, lines 22-26).

As per claim 9, the applicant describes the method of claim 1, which is met by Moore in view of  
10 Schneier, with the following limitation which is also met by Moore:

a) identifying an event related to generation of said charge (Moore: Col 5, line 20 to Col 6, line 9);  
b) upon an occurrence of said event, calculating said charge to obtain an event-related charge  
(Moore: Col 5, line 20 to Col 6, line 9);

c) storing said event-related charge together with the usage value that was employed to generate  
15 said event-related charge (Moore: Col 5, line 20 to Col 6, line 9).

As per claim 10, the applicant describes the method of claim 9, which is met by Moore in view of Schneier, with the following limitation which is also met by Moore:

Wherein the step of identifying said event comprises identifying a change of said rate value as  
20 said event (Moore: Col 5, line 20 to Col 6, line 9).

As per claim 12, the applicant describes the method of claim 1, which is met by Moore in view of Schneier, with the following limitation which is also met by Moore:

Analyzing said use data to identify usage behavior at said use location (Moore: Col 5, line 20 to  
25 Col 6, line 9).

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As per claim 13, the applicant describes the method of claim 1, which is met by Moore in view of Schneier, with the following limitation which is also met by Schneier:

Generating an authentication code as said check code (Schneier: pages 37-38).

5 As per claim 14, the applicant describes the method of claim 13, which is met by Moore in view of Schneier, with the following limitation which is also met by Schneier:

Selecting said authentication code from the group consisting of a hash code and an MAC, and forming said authentication code according to a symmetrical encryption algorithm (Schneier: pages 35-37).

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Claim 4 is rejected under 35 U.S.C. 103(a) as being unpatentable over Moore in view of Schneier in further view of Nielsen, U.S. Patent No. 6,453,327.

15 As per claim 4, the applicant describes the method of claim 3, which is met by Moore in view of Schneier, with the following limitations which are met by Moore and Nielsen:

a) if said enable code is authentic, resetting said charge to zero (Moore: Col 6, lines 1-9; Nielsen: Col 14, lines 47-56);

b) if said enable code is not authentic, inhibiting further usage of said commodity at said use location (Moore: Col 6, lines 1-9; Nielsen: Col 14, lines 47-56);

20 Moore in view of Schneier disclose all the limitations of claim 3. Moore in view of Schneier also disclose that an enable code is sent from the remote location to the use location. When the enable code is received, the charge is reset to zero. While waiting for the enable code, further usage of the commodity at the use location is inhibited. Moore in view of Schneier, however, do not disclose making a determination that the enable code message is authentic.

25 Nielsen discloses the idea that a received message may be accepted if it is authentic and discarded if it is not authentic. Combining the ideas of Nielsen with those of Moore in view of Schneier allows the system to check for the authenticity of the enable code. It would have been obvious to one of

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ordinary skill in the art at the time the invention was filed to combine the ideas of Nielsen with those of Moore in view of Schneier because checking for the authenticity of the enable code makes the system more robust by enhancing security.

5            Claim 5 is rejected under 35 U.S.C. 103(a) as being unpatentable over Moore in view of Schneier in further view of Selph, UK Patent Application No. GB 2183852.

As per claim 5, the applicant describes the method of claim 1, which is met by Moore in view of Schneier, with the following limitation which is met by Selph:

10            Wherein the step of generating said electronic message comprises including said usage value and said time data in said electronic message together with said charge (Col 3, lines 77-88);  
Moore in view of Schneier disclose all the limitations of claim 1. However, Moore in view of Schneier do not disclose sending the usage and time data. Selph discloses the idea of reporting usage and time data back to a remote location. It would have been obvious to one of ordinary skill in the art at the time the  
15            invention was filed to combine the ideas of Selph with those of Moore in view of Schneier because reporting usage and time data allows the remote location to further track the commodity usage for reasons such as billing and/or charge verification.

### ***Response to Arguments***

20            Applicant's arguments filed 1/17/06 with respect to the rejection of claim 1 under Moore in view of Schneier have been fully considered but they are not persuasive. Applicant's presents the following two arguments (see Remarks, page 2):

- a) a digital signature is not a check code
- b) motivation for combination of Schneier and Moore

25            Regarding a), applicant argues that a digital signature is not a check code. Examiner respectfully disagrees with such an assertion, especially in light of the fact that applicant teaches that a digital

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signature is a check code. Examiner respectfully submits that claim 13 of the instant claims teaches “generating an **authentication code as said check code**”. As disclosed in applicant’s Specification, page 15, lines 3-4, an authentication code is a digital signature. Thus, for at least the reason that the Specification, itself, appears to teach that a digital signature *is* a check code, Examiner respectfully  
5 disagrees with applicant’s assertion that a digital signature *is not* a check code.

Regarding (b), applicant argues motivation. More specifically, applicant states the following: “Examiner has not provided sufficient evidence to justify the Examiner’s conclusion that it would have been obvious to modify the procedure disclosed in the Moore reference to provide protection for the *contents* of the message that includes the charge for the usage of the commodity” (Remarks, page 7).

10 Examiner respectfully notes that motivation for combining Schneier with Moore was provided in the previous action. The motivation provided was that the use of a digital signature provides a means to check the authenticity of a message and its sender.

As appropriately noted in Applicant’s Specification, a digital signature may secure message data (Specification, page 7, lines 6-7). In generating a digital signature, message data may be hashed and  
15 then signed with a private key of a signatory. The recipient may be able to authenticate the signer of the document (For example, Schneier page 35, lines 1-2). The recipient may also be able to verify the message data as not having been altered in communication (For example, Schneier, page 35, lines 7-8; page 41, lines 5-12). Thus, motivation to combine Schneier with Moore is apparent for at least the reasons that doing so provides a means to check the authenticity of a message and its sender.

20 Accordingly, applicant’s argument that there is no motivation for combination is not persuasive, and the rejection is maintained.

### **Conclusion**

**THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth  
25 in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date

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of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX

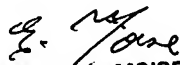
5 MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kevin Schubert whose telephone number is (571) 272-4239. The examiner can normally be reached on M-F 7:30-6:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor,  
10 Emmanuel Moise can be reached on (571) 272-3865. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through  
15 Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

20 KS

  
**EMMANUEL L. MOISE**  
**SUPERVISORY PATENT EXAMINER**